DINEX. EQUIPMENT SYSTEMS

DINEX®

Model DBC70
BLAST CHILLER/SHOCK FREEZER
User's Manual

For Service Information, call 1-888-673-4639

Please provide following information:

- Model number
- Serial number
- Part Description and number as shown in parts list.

Printed in the USA

Manual No. DBC70 Rev-03/08

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INTRODUCTION

You have just purchased the new Dinex Equipment. Please read this manual for helpful guidelines on how to use your Equipment. Should you have any questions concerning the Equipment, please call the Dinex Hotline at 1-888-673-4639 (Monday through Friday from 8 am to 5 pm, Eastern Standard Time).

The Model DBC70 Blast Chiller/Shock Freezer is used to rapidly chill cooked foods to temperatures suitable for refrigerated or frozen storage. It has a capacity of 7 pans, with a maximum size of 18" x 26" (pans (not included)on the (7) provided stainless steel wire shelves. Model DBC70, in chiller mode, is capable of lowering the core temperature of up to 70 lbs. of food from 160° F to 40° F within 90 minutes. In Shock Freeze mode it is capable of lowering the core temperature of up to 42 lbs. of food from 160° F to 0° F within 4 hours. Model DBC70 can have as options UV sterilization, an integral temperature recording device (printer), a second heated probe or a total of three non heated probes. It employs a high velocity flow of cooled air to assure even cooling of the food product, and to quickly bring the food temperature through the danger zone in which bacteria multiply rapidly. This is done in accordance with HACCP, FDA and all state regulations.

CONTROLLER FEATURES

The electronic control system is solid state and is based on the latest microprocessor technology. The display is VFD Industrial Type. It displays (4) lines of 20 characters each and allows operator viewing from any angle. The display is programmed to show clear step-by-step instructions and operating data. It is capable of storing 250 sets of data and 150 recipes.The unit has built-in safety and self-diagnostic systems. The controller notifies the operator if various faults, as listed below, should occur:

- Power supply failure / Restoration of power
- Faulty air temperature probe
- Faulty food temperature probe
- High air temperature (above 140° F)
- Low air temperature (below -35° F)
- High food temperature (above 180° F)
- Low food temperature (below 35° F)
- Excessively high or low pressures.

As an option, the unit can be operated by a PC. The PC interface allows the operator to remotely program the unit, operate it, download the data and print the data.

OPERATING MODES

The operator can choose from the following modes:

Automatic Mode

This is the preferred mode, in which the food probe is active and takes part in controlling the chilling or freezing processes. The cycle will never proceed to its next step until the food probe has reached its set breaking temperature. The operator needs only to select the recipe number of the food to be processed (up to 150 recipes can be programmed), then insert the probe into the food. It is recommended that the operator remove the food when its temperature starts to flash and the display shows "Ready". The unit will automatically switch into holding mode (cavity air temperature between 35° F and 42° F) when the food has reached the end cycle programmed temperature.

Manual Mode

Operating time is set manually, by the operator, for the meal that has been chosen. Air temperature is controlled by the air probe. If the food probe has been inserted into the food it will provide temperature readouts only. The unit will automatically switch into the holding mode at the end of the cycle.

OPERATING CYCLES

The operator can choose from the following 3 operating cycles:

MODE	END FOOD TEMP.	USES	NOTES
Soft Chill	38° F To 40° F	For low density foods	Air temp. is 28°°F to 35°F
Hard Chill	38° F To 40° F	For medium and high density foods	Air temp starts at 0°F, rises to 28°F to 35°F when food core temp. reaches 60°F
Shock Freeze	0°F	Freeze for longer storage	Air temp is held at - 25°F

NOTE: *All Chill and Freeze Cycles automatically go into HOLDING MODE when the selected food core temperature is reached and remain there until the operator stops the cycle.*

ADDITIONAL CYCLES

MODE	USES	NOTES
Defrost	To defrost the evaporator, not the food.	Use after shock freezing cycle
UV	To sterilize the cavity, not the food.	Use when desired
Heat Probe	To heat the food probe	Allows easier extraction from the food

PRINTER (OPTIONAL)

An optional strip recorder provides a record of the unit's operating parameters during the cycle and the following holding period. The information recorded includes date, time, cycle identification, product identification and product core temperature at prescribed intervals.

PC CONNECTION (OPTIONAL)

The unit can be programmed and operated from a remote PC via modem and software (Windows 95, 98, NT, XP). Maximum distance is 4000 ft. Full instructions are supplied on a computer disc, which is furnished when the computer connection is ordered.

INSTALLATION

WARNING: *Read and carefully follow all of the instructions in this manual before you attempt to install this equipment.*

NOTE: *Any changes made to the equipment without authorization from the factory will void the warranty.*

PREPARATION

- Check the integrity of the unit once it is unpacked
- Check to make sure the floor is level
- Check that the available power supply (Voltage, # of phases, Hz, Amps, max. fuse size) corresponds to the ratings on the nameplate and that correctly rated electrical protection is provided (**VOLTAGE MUST BE WITHIN ± 5% FROM THE NAMEPLATE VALUE**).

INSTALLATION

Dimensions

Overall dimensions are 32 1/4" left to right, 36" front to back, 53"' height. With the door open 90° the front to back, distance is 66 1/8".

Location

Ambient air temperature should be **no greater than 90°F** to ensure the rated performance.

Do NOT install the unit near a heat source, in an area exposed to direct sunlight, or in a closed area with high temperatures and insufficient air change.

Level the unit by rotating its adjustable feet, ensuring that the weight of the unit is off the legs when doing so.

Make certain that the unit is correctly leveled - correct functioning may be compromised if it is not.

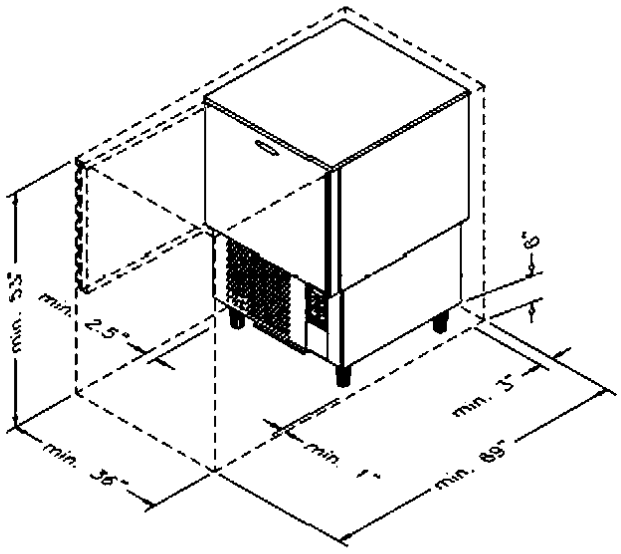
Mount the rails for the drain pan, using the screws sent with the unit. The mounting inserts are already in place under the unit. Slide the drain pan on the rails.

Plug the power supply cord into a proper outlet in accordance with the chart below.

MODEL	VOLTAGE	HZ	HP	AMPS	NOTES
DBC70	208, 1 PH	60	1.2	12	L6-20P

Spaces Around The Cabinet

- At least 1" clear space is required on the right side of the cabinet for air flow and service.
- At least 2.5" clear space is required on the left side of the cabinet for door opening and air flow.
- At least 3" clear space is required on the rear of the cabinet for optimum air flow.
- Enough space should be provided in front of the cabinet to fully open the door.



USING THE DBC70 TECHNOLOGY

BLAST CHILLING

All cooked food rapidly loses its quality and aroma if it is not served promptly. Natural bacteria growth, the main reason why food becomes stale, takes place at an exponential rate between 140°F and 40°F. However lower temperatures have a hibernating effect that increases as the temperature drops, thereby gradually reducing bacterial activity until it stops altogether. Only fast reduction of the temperature at the product's core allows its initial characteristics to be maintained intact. The DBC70 blast chiller gets food through this high-risk temperature band rapidly, cooling the core of the product to 40°F within 90 minutes. This conserves food quality, color and aroma while increasing its storage life. After blast chilling, the food can be preserved at 38°F for up to 5 days.

SHOCK FREEZING

For storage over the medium-long term, food has to be shock frozen (to 0°F or below). Freezing means converting the water contained in food into crystals. Thanks to the high speed at which low temperature penetrates the food, the DBC70 shock freezer assures the formation of small crystals (micro-crystals) that do not damage the product in any way. Uncooked raw materials, semiprocessed food and cooked food can be treated safely. When the food is thawed, no liquids, consistency, weight or aroma will be lost, and all its initial qualities will remain unchanged.

SOFT CHILL CYCLE

(160°F to 40°F)

This cycle is recommended for "delicate", light, thin products or small piece sizes, such as vegetables, creams, sweets, fish products and fried foods. Soft chilling lowers the food temperature quickly, but extremely delicately so as not to damage the outside of the food. This is the ideal cycle to chill any food quickly but delicately, even in haute cuisine.

HARD CHILL CYCLE

*(*160°F TO 40°F)

Hard chilling is suited for "dense" products and products with a high fat content, in large pieces or those products typically more difficult to chill. Careful chilling control ensures that the end temperature of 40°F is reached at the core of the product, with no danger of freezing and damaging the product, not even on its surface.

SHOCK FREEZE CYCLE

*(*160°F TO 0°F)

This cycle is recommended when you want to store food for several weeks or months, at temperatures below 0°F. Freezers are suited for storing ready frozen foods, but not for freezing them. During shock freezing, the liquids contained in the food are transformed into micro-crystals that do not harm the tissue structure. When the food is used and thawed, its quality will be excellent. It is especially suited for all semi-processed food and raw products.

CONTROL PANEL FOR MODEL DBC70 BLAST CHILLER

KEYBOARD KEYS

ON/OFF & START/STOP

- **ON/OFF**
- **START/STOP**

PROGRAMMING KEYS

- **UP**
- **DOWN**
- **SELECT**
- **ENTER**

CYCLE KEYS

- **SOFT CYCLE**
- **HARD CYCLE**
- **SHOCK CYCLE**
- **AUTOMATIC CYCLE**
- **MANUAL CYCLE**
- **UV LIGHT CYCLE**
- **DEFROST CYCLE**
- **PRINT**
- **HEAT PROBE CYCLE**

KEY COMBINATIONS

> **Initial Programming** state – to initially set the device

- With the display reading **"OFF"**, press and hold **(“START/STOP”)** for 5 seconds

> **Cycles programming** state – to initially set the cycles

- With the display reading **"OFF",** press **(“ENTER”)** for 1 second

> **Recipe name programming** state – to enter recipe names

- With the display reading **"OFF",** press **(“A”)** for 10 seconds

> **Load default values** state – to load the standard parameters

- With the display reading **"OFF",** press **(”UP”)** for 10 seconds

> **Clear events memory** state – to clear obsolete data

- With the display reading **"OFF",** press **+** **(”UP”+”DOWN”)** for 10 seconds

> **Ready To Go** state – in order to start a cycle

- If the controller is not **"OFF",** press **(“ON/OFF”)** once.

PROGRAMMING

1. INITIAL PROGRAMMING

NOTE: Initial programming is preset at the factory. Use this section only if changes are desired. If no changes are to be made, skip to Page 10. (2. Programming the cycles).

a. With the display reading **"OFF"**, press **("START/STOP")** for a few seconds.

OFF

b. To change the language, press or then press ENTER.

INITIAL PROGRAMMING SELECT LANGUAGE ENGLISH	ENGLISH Blinks

c. Enter the default password by pressing, in order, the SOFT, HARD, SHOCK and ENTER buttons.

INITIAL PROGRAMMING ENTER PASSWORD: ***

d. If you do **not** wish to change the password, press ENTER.

To change the default password, press or for **"YES"** then press ENTER.

INITIAL PROGRAMMING CHANGE PASSWORD? NO

The password will always be a combination of three of the six available cycles:

SOFT HARD SHOCK (**"SOFT", "HARD","SHOCK","DEF" "UV:, "HEAT PROBE"**).

Type the new password, then press ENTER.
Be sure to remember the new password and keep a record of it in a safe place.

e. To change the year, press or then press ENTER.

INITIAL PROGRAMMING SET YEAR 2006	2006(year) Blinks

f. To change the month, press or then press ENTER.

INITIAL PROGRAMMING SET MONTH 07	07(month) Blinks

g. To change the day, press or then press ENTER.

INITIAL PROGRAMMING SET DAY 03	03(day) Blinks

h. To set the hour, press or (be sure to continue to press the buttons until the hour and **"AM"** or **"PM"** show correctly) then press .

INITIAL PROGRAMMING
SET TIME
10:25 AM

10(hours) Blinks

i. To set the minutes, press or then press .

INITIAL PROGRAMMING
SET TIME
10:25 AM

25(minutes) Blinks

The high air alarm temperature should be left at 140 °F.
However, if a change is desired:

j. To change the temperature, press or then press

INITIAL PROGRAMMING
HIGH AIR ALARM
140°F

140 Blinks

The low air alarm temperature should be left at -35 °F.
However, if a change is desired:

k. To change the temperature, press or then press

INITIAL PROGRAMMING
LOW AIR ALARM
-35°F

-35 Blinks

l. To change the number of probes, press or then press .

INITIAL PROGRAMMING
FOOD PROBES NUMBER?
1

1 Blinks

> ***NOTE**: Standard Configuration has only one food probe. However, a maximum of two heated probes or three non heated probes can be used with this model.*

The high food alarm temperature should be left at 180 °F.
However, to make a change:

m. To change the temperature, press or then press .

INITIAL PROGRAMMING
HIGH FOOD ALARM
180°F

180 Blinks

The low food alarm temperature should be left at 35 °F.
However, to make a change:

n. To change the temperature, press or then press .

INITIAL PROGRAMMING
SOFT & HARD
LOW AIR ALARM
35°F

35 Blinks

o. To change to **YES** or **NO**, press or then press .

INITIAL PROGRAMMING
SHOCK FREEZE?
YES

YES Blinks

p. To change to temperature, press or then press .

INITIAL PROGRAMMING
SHOCK FREEZE
LOW FOOD ALARM
-5°F

-5 Blinks

q. To change to **YES** or **NO**, press or
then press .

INITIAL PROGRAMMING
UV CYCLE?
NO

NO Blinks

---

r. To change to **YES** or **NO**, press or
then press .

INITIAL PROGRAMMING
DEFROST CYCLE?
YES

YES Blinks

---

s. To change to **YES** or **NO**, press or
then press .

INITIAL PROGRAMMING
PC CONNECTION?
NO

NO Blinks

For **YES**, the display will show:
The P.C. baud rate should be left at 38400.
However, to make a change:

t. To change the baud rate, press or
then press .

INITIAL PROGRAMMING
PC BAUDRATE
38400

38400 Blinks

---

u. To change the number (between 01 & 32), press or
then press .

INITIAL PROGRAMMING
CHILLER NETWORK ID
#01

01 Blinks

---

v. To change to **YES** or **NO**, press or
then press .

INITIAL PROGRAMMING
PRINTER CONNECTION?
NO

NO Blinks

For **YES**, the display will show:
The printer baud rate should be left at 1200.
However, to make a change:

w. To change the baud rate, press or then press .

INITIAL PROGRAMMING
PRINTER BAUD RATE
1200

1200 Blinks

---

x. To change the timing, press or
then press .

INITIAL PROGRAMMING
PRINT & SAVE EVENTS
EVERY 15 MIN

15 Blinks

---

y. To change to **YES** or **NO**, press or
then press .

INITIAL PROGRAMMING
PRINT DURING CYCLE
NO

NO Blinks

---

z. To change to **YES** or **NO**, press or
then press .

INITIAL PROGRAMMING
RECIPES?
NO

NO Blinks

---

aa. To change to **YES** or **NO**, press or
then press .

INITIAL PROGRAMMING
NAFEM COMMUNICATION
NO

NO Blinks

The display will show:

INITIAL PROGRAMMING COMPLETE

NOTE: *During programming* SELECT *key can be used to return to the previous screen (except at the steps 1h, 1i and 3d, when it has different functions).*

ENTER *key is used to confirm the settings and advance to the next screen.*

2. PROGRAMMING THE CYCLES

a. With the display reading **"OFF"**, then press SELECT .

OFF

b. Enter your password (see page 7), then press ENTER .

PARAM. PROGRAMMING ENTER PASSWORD: ***

AUTOMATIC SOFT CYCLE PARAMETERS PROGRAMMING

The **LED** for **"A"** will be **"ON"**. The **LED"S** for cycles will be blinking.

c. Press SOFT . The **LED** for **"SOFT"** will be **"ON"**.

PARAM. PROGRAMMING AUTOMATIC MODE CHOOSE PROGRAMMING CYCLE

d. To change the temperature, pre ▲ or ▼ then press ENTER .

PARAM. PROGRAMMING AUTOMATIC SOFT CYCLE LOW AIR TEMPERATURE 28°F	28 Blinks

e. To change the temperature, press ▲ or ▼ then press ENTER .

PARAM. PROGRAMMING AUTOMATIC SOFT CYCLE HIGH AIR TEMPERATURE 35°F	35 Blinks

f. To change the temperature, press ▲ or ▼ then press ENTER .

PARAM. PROGRAMMING AUTOMATIC SOFT CYCLE FOOD TEMPERATURE 40°F	40 Blinks

g. To change the temperature, press ▲ or ▼ then press ENTER .

PARAM. PROGRAMMING AUTOMATIC SOFT CYCLE HOLDING LOW TEMP. 35°F	35 Blinks

h. To change the temperature, press ▲ or ▼ then press ENTER .

PARAM. PROGRAMMING AUTOMATIC SOFT CYCLE HOLDING LOW TEMP. 42°F	42 Blinks

The display will show:

PARAM. PROGRAMMING **AUTOMATIC SOFT CYCLE** **PROGRAMMING COMPLETE**

AUTOMATIC HARD CYCLE PARAMETERS PROGRAMMING

After about 2 seconds the display will automatically change to::

i. Press the HARD button. The **LED** for **"HARD"** will be **"ON"**.

PARAM. PROGRAMMING **AUTOMATIC MODE** **CHOOSE** **PROGRAMMING COMPLETE**

j. To change the temperature press or

then press ENTER .

PARAM. PROGRAMMING **AUTOMATIC HARD CYCLE** **LOW AIR TEMP PART 1** **0°F**	0 Blinks

k. To change the temperature press or

then press ENTER .

PARAM. PROGRAMMING **AUTOMATIC HARD CYCLE** **HIGH AIR TEMP PART 1** **10°F**	10 Blinks

l. To change the temperature press or

then press ENTER .

PARAM. PROGRAMMING **AUTOMATIC HARD CYCLE** **BREAKING TEMP** **60°F**	60 Blinks

m. To change the temperature press or

then press ENTER .

PARAM. PROGRAMMING **AUTOMATIC HARD CYCLE** **LOW AIR TEMP PART 2** **28°F**	28 Blinks

n. To change the temperature press or

then press ENTER .

PARAM. PROGRAMMING **AUTOMATIC HARD CYCLE** **HIGH AIR TEMP PART 2** **35°F**	35 Blinks

o. To change the temperature press or

then press ENTER .

PARAM. PROGRAMMING **AUTOMATIC HARD CYCLE** **HARD FOOD TEMP** **40°F**	40 Blinks

p. To change the temperature press or

then press ENTER .

PARAM. PROGRAMMING **AUTOMATIC HARD CYCLE** **HOLDING LOW TEMP** **35°F**	35 Blinks

q. To change the temperature press or

then press ENTER .

PARAM. PROGRAMMING **AUTOMATIC HARD CYCLE** **HOLDING HIGH TEMP** **42°F**	42 Blinks

The display will show:

PARAM. PROGRAMMING **AUTOMATIC HARD CYCLE** **PROGRAMMING COMPLETE**

AUTOMATIC SHOCK CYCLE PARAMETERS PROGRAMMING

After about 2 seconds the display will automatically change to:

r. Press the SHOCK button. The **LED** for **"SHOCK"** will be **"ON"**.

PARAM. PROGRAMMING **AUTOMATIC MODE** **CHOOSE** **PROGRAMMING COMPLETE**

s. To change the temperature press or

then press ENTER .

PARAM. PROGRAMMING **AUTOMATIC SHOCK CYCLE** **LOW AIR TEMPERATURE** **-25°F**	-25 Blinks

t. To change the temperature press or

then press ENTER .

PARAM. PROGRAMMING **AUTOMATIC SHOCK CYCLE** **HIGH AIR TEMPERATURE** **-15°F**	-15 Blinks

u. To change the temperature press or

then press ENTER .

PARAM. PROGRAMMING **AUTOMATIC SHOCK CYCLE** **FOOD TEMPERATURE** **0°F**	0 Blinks

v. To change the temperature press or

then press ENTER

PARAM. PROGRAMMING **AUTOMATIC SHOCK CYCLE** **HOLDING LOW TEMP** **-4°F**	-4 Blinks

w. To change the temperature press or

then press ENTER .

PARAM. PROGRAMMING **AUTOMATIC SHOCK CYCLE** **HOLDING HIGH TEMP** **3°F**	3 Blinks

The display will show:

PARAM. PROGRAMMING **AUTOSHOCK CYCLE** **PROGRAMMING COMPLETE**

UV LIGHT CYCLE PARAMETERS PROGRAMMING

After about 2 seconds the display will automatically change to:

x. Press the button. The **LED** for **"UV LIGHT"** will be **"ON"**.

PARAM. PROGRAMMING **AUTOMATIC MODE** **CHOOSE** **PROGRAMMING CYCLE**

y. To change the time press or

then press ENTER .

PARAM. PROGRAMMING **UV CYCLE** **CYCLE TIME** **H 00:30 MIN**	00:30 Blinks

The display will show:

PARAM. PROGRAMMING **UV CYCLE** **PROGRAMMING COMPLETE**

DEFROST CYCLE PARAMETERS PROGRAMMING

After about 2 seconds the display will automatically change to:

z. Press the button . The **LED** for **"DEFROST"** will be **"ON"**.

PARAM. PROGRAMMING **AUTOMATIC MODE** **CHOOSE** **PROGRAMMING CYCLE**

aa. To change the time, press or

then press .

PARAM. PROGRAMMING **DEFROST CYCLE** **TOTAL TIME** **05 MIN**	05 Blinks

The display will show:

PARAM. PROGRAMMING **DEFROST CYCLE** **PROGRAMMING COMPLETE**

! **NOTE:** *The defrost is done by running the evaporator fan for 5 minutes with the door open*

HEATED PROBE CYCLE PARAMETERS PROGRAMMING

After about 2 seconds the display will automatically change to:

bb. Press the button. The **LED** for **"HEATED PROBE"** will be **"ON"**.

PARAM. PROGRAMMING **AUTOMATIC MODE** **CHOOSE** **PROGRAMMING CYCLE**

cc. To change the temperature, press or

then press .

PARAM. PROGRAMMING **HEATED PROBE CYCLE** **HEATING TEMPERATURE** **30°F**	30 Blinks

dd. To change the time, press or then press .

then press .

PARAM. PROGRAMMING **HEATED PROBE CYCLE** **HEATING TIME** **05 SEC**	05 Blinks

The display will show:

PARAM. PROGRAMMING **HEATED PROBE CYCLE** **PROGRAMMING COMPLETE**

After about 2 seconds the display will automatically change to:

ee. Press to program the manual mode. The **"M" LED** will be steady **"ON"** and the **6 "CYCLE LED'S"** will all blink.

PARAM. PROGRAMMING **AUTOMATIC MODE** **CHOOSE** **PROGRAMMING CYCLE**

MANUAL SOFT CYCLE PARAMETERS PROGRAMMING

ff. Press . The **LED** for **"SOFT"** will be **"ON"**

PARAM. PROGRAMMING **MANUAL MODE** **CHOOSE** **PROGRAMMING CYCLE**

gg. To change the temperature, press or then press .	**PARAM. PROGRAMMING MANUAL SOFT CYCLE LOW AIR TEMPERATURE 28°F**	28 Blinks
hh. To change the temperature, press or then press .	**PARAM. PROGRAMMING MANUAL SOFT CYCLE HIGH AIR TEMPERATURE 35°F**	35 Blinks
ii. To change the time, press or then press .	**PARAM. PROGRAMMING MANUAL SOFT CYCLE TOTAL TIME H 01:30 MIN**	01:30 Blinks
jj. To change the temperature, press or then press .	**PARAM. PROGRAMMING MANUAL SOFT CYCLE HOLDING LOW TEMP 35°F**	35 Blinks
kk. To change the temperature, press or then press .	**PARAM. PROGRAMMING MANUAL SOFT CYCLE HOLDING HIGH TEMP 42°F**	42 Blinks
The display will show:	**PARAM. PROGRAMMING MANUAL SOFT CYCLE PROGRAMMING COMPLETE**	

MANUAL HARD CYCLE PARAMETERS PROGRAMMING

After about 2 seconds the display will automatically change to: ll. Press the HARD button. The **LED** for **"HARD"** will be **"ON"**.	**PARAM. PROGRAMMING MANUAL MODE CHOOSE PROGRAMMING CYCLE**	
mm. To change the temperature, press or then press .	**PARAM. PROGRAMMING MANUAL HARD CYCLE LOW AIR TEMP PART 1 0°F**	0 Blinks
nn. To change the temperature, press or then press .	**PARAM. PROGRAMMING MANUAL HARD CYCLE HIGH AIR TEMP PART 1 10°F**	10 Blinks
oo. To change the time, press or then press .	**PARAM. PROGRAMMING MANUAL HARD CYCLE TIME 1 H 01:00 MIN**	01:00 Blinks
pp. To change the temperature, press or then press .	**PARAM. PROGRAMMING MANUAL HARD CYCLE LOW AIR TEMP PART 2 28°F**	28 Blinks

qq. To change the temperature, press or
then press .

PARAM. PROGRAMMING
MANUAL HARD CYCLE
HIGH AIR TEMP PART 2
35°F

35 Blinks

rr. To change the time, press or
then press .

PARAM. PROGRAMMING
MANUAL HARD CYCLE
TIME 2
H 01:00 MIN

01:00 Blinks

ss. To change the temperature, press or
then press .

PARAM. PROGRAMMING
MANUAL HARD CYCLE
HOLDING LOW TEMP.
35°F

35 Blinks

tt. To change the temperature, press or
then press .

PARAM. PROGRAMMING
MANUAL HARD CYCLE
HOLDING HIGH TEMP.
42°F

42 Blinks

The display will show:

PARAM. PROGRAMMING
MANUAL HARD CYCLE

PROGRAMMING COMPLETE

MANUAL SHOCK CYCLE PARAMETERS PROGRAMMING

After about 2 seconds the display will automatically change to:

PARAM. PROGRAMMING
MANUAL MODE
CHOOSE
PROGRAMMING CYCLE

uu. Press the button. The **LED** for **"SHOCK"** will be **"ON"**.

vv. To change the temperature, press or
then press .

PARAM. PROGRAMMING
MANUAL SHOCK CYCLE
LOW AIR TEMPERATURE
-25°F

-25 Blinks

ww. To change the temperature, press or .
then press .

PARAM. PROGRAMMING
MANUAL SHOCK CYCLE
HIGH AIR TEMPERATURE
-15°F

-15 Blinks

xx. To change the time, press or
then press .

PARAM. PROGRAMMING
MANUAL SHOCK CYCLE
TOTAL TIME
H 0:400 MIN

04:00 Blinks

yy. To change the temperature, press or
then press .

PARAM. PROGRAMMING
MANUAL SHOCK CYCLE
HOLDING LOW TEMP.
-4°F

-4 Blinks

zz. To change the temperature, press or
then press .

PARAM. PROGRAMMING
MANUAL SHOCK CYCLE
HOLDING HIGH TEMP.
3°F

3 Blinks

The display will show:

PARAM. PROGRAMMING MANUAL SHOCK CYCLE PROGRAMMING COMPLETE

After about 2 seconds the display will automatically change to:

PARAM. PROGRAMMING MANUAL MODE CHOOSE PROGRAMMING CYCLE

NOTE: ***Programming for "DEFROST", "UV", and "HEAT PROBE" will be the same in manual mode as it is in automatic mode. (see oages 14-15)***

3. RECIPE NAME PROGRAMMING

a. With the display reading **"OFF"**, press the A button and hold it for 10 seconds.

OFF

b. Enter your the password (see page 7), then press ENTER .

RECIPES PROGRAMMING ENTER PASSWORD ***

c. Press ▲ or ▼ to change to the desired recipe number (from 1 to 150), then press ENTER which will move you to the **"NAME"** line.

ENTER RECIPE NUMBER 1 ENTER RECIPE NAME

[1] Blinks

d. Using ▲ or ▼ type the letters or numbers required, then press SELECT . To confirm the recipe and go to the next one press ENTER .

ENTER RECIPE NUMBER 1 ENTER RECIPE NAME CHICKEN_

[ ] Blinks

If a mistake is made in writing a recipe, use SELECT to go to the desired location and correct it using ▲ or ▼ .

There is a blank space after number 9. It can be used to add a space or delete a letter. Press ENTER when the recipe is corrected.

To finish the recipe name programming press ⏻ (**"ON/OFF"**).

OPERATION

1. AUTOMATIC MODE - SOFT CHILL

a. With the display reading **"OFF"**, press the ⏻ (**"ON/OFF"**) button.

OFF

b. To select a cycle, press the appropriate button

.
The **LED** for **"SOFT"** will be **"ON"**.

OPERATING MODE CHOOSE OPERATING CYCLE

c. The LED's for **"AUTOMATIC"** and **"MANUAL"** are now blinking.

To select an **"AUTOMATIC"** cycle, press the button

.

The LED for **"AUTOMATIC"** will now be steady **"ON"**.

SOFT CYCLE CHOOSE MODE AUTO / MAN

d. To choose your recipe, press or then press

.

RED FOOD PROBE ENTER RECIPE NUMBER 1 CHICKEN	1 Blink

This screen is shown only if the **RECIPE** parameter is set to **"ON"** in the I**NITIAL PROGRAMMING**. The red food probe only will be active in the standard configuration. To enter additional recipe names, refer to Page 16 **"RECIPE NAME PROGRAMMING"**.

The display will show:

READY TO START PRESS START	PRESS START Blinks

alternating with

03.07.2006 10:28 AM AIR 75°F R / CHICKEN 140°F

e. Press the (**"START/STOP")** button to start the cycle.

The display will show:

03.07.2006 10:28 AM AIR 75°F R / CHICKEN 140°F	00:00 Will count up

alternating with

03.07.2006 00:00 AIR 75°F R / CHICKEN 140°F

The **AUTOMATIC** mode uses both the food probe and air probe temperatures to control the cycle. When the food temperature has reached the final setting of 40° F, the unit will automatically go into holding mode and a beep will sound for 5 seconds. The elapsed time and food temperature readouts will blink.

The display will show:n

03.07.2006 11:56 AM AIR 34°F R / CHICKEN 40°F	40°F is Alternating with READY

alternating with

03.07.2006 01:28 AIR 34°F R / CHICKEN 40°F	01:28 Blinks 40°F is Alternating with READY

The operator can now end this cycle by pressing the (**"START/ STOP"**) button.

The display will now show:

OPERATING MODE CHOOSE OPERATING CYCLE

2. MANUAL MODE - SOFT CHILL

a. **IF INSTEAD OF AUTOMATIC** you wish to select a **MANUAL** cycle, perform steps 1.a, 1.b, 1.c and 1.d (above), except in step 1.c press button **M** **instead of button** **A** . The LED for **"MANUAL"** will then be steady **"ON"**. The four readouts in those steps will be the same as before.

! **NOTE:** Cycle time can be changed only in Programming mode. To change the programmed cycle time for any cycle see the instructions on Pages 10 to 17.

b. Press the ○ (**"START/STOP"**) button to start the cycle.

The display show will

03.07.2006	**10:41 AM**
AIR	**75°F**
R / CHICKEN	**140°F**

01:29 Will count down

alternating with

03.07.2006	**01:29**
AIR	**75°F**
R / CHICKEN	**140°F**

The **MANUAL** mode uses time and the air probe temperature to control the cycle. The default total time for a soft cycle is 90 minutes. After the 90 minutes the unit will automatically go into holding mode.

The display show will:

03.07.2006	**12:11 AM**
AIR	**34°F**
R / CHICKEN	**40°F**

alternating with

03.07.2006	**00:00**
AIR	**34°F**
R / CHICKEN	**40°F**

00:00 Blinks

The operator can now end this cycle by pressing ○ (**"START/ STOP"**).

The display will now show:

OPERATING MODE

CHOOSE OPERATING CYCLE

3. HARD CHILL CYCLE

To perform a hard chill cycle, follow steps **1 or 2** (above), **EXCEPT** in step 1.b (above) press **HARD** instead of **SOFT** .

4. SHOCK FREEZE CYCLE

To perform a shock freeze cycle, follow steps **1 or 2** (above), **EXCEPT** in step 1.b (above) press **SHOCK** instead of **SOFT** .

5. UV (STERILIZATION) CYCLE

a. To perform a UV cycle **remove all food**, then press the (**"UV LIGHT"**) button.

OPERATING MODE

CHOOSE OPERATING CYCLE

b. Press the (**"START/STOP"**) button to start the UV cycle.

03.07.2006 11:43 AM
UV CYCLE

READY TO START

READY TO START Blinks

The display will now show:

03.07.2006 11:43 AM
UV CYCLE

UV TIME 29:59

29:59 Will count down to 00:00

After 30 minutes the display will show:
The controller will beep for a few seconds..

03.07.2006 12:13 AM
UV CYCLE

COMPLETE

6. DEFROST CYCLE

The defrost cycle runs the evaporator fan for 5 minutes with the door open.

a. To perform a defrost cycle, press (**"DEFROST"**) button.

OPERATING MODE

CHOOSE OPERATING CYCLE

b. Open the door.

03.07.2006 12:15PM
DEFROST CYCLE

OPEN DOOR!

c. Press the (**"START/STOP"**) button to start the defrost cycle.

03.07.2006 12:15PM
DEFROST CYCLE

READY TO START

READY TO START Blinks

The display will now show:

03.07.2006 12:15PM
DEFROST CYCLE

DEFROST TIME 04:59

04:59 Will count down to 00:00

After 5 minutes the display will show:
The controller will beep for a few seconds.

03.07.2006 12:20PM
DEFROST CYCLE

COMPLETE

7. HEATED FOOD PROBE

a. To select the heated food probe, press (**"HEATED PROBE"**).

OPERATING MODE

CHOOSE OPERATING CYCLE

If the food probe temperature is >30 °F, the display will show:

HEATED FOOD PROBE
NOT NEEDED

After a few seconds it will go back to reading:

OPERATING MODE

CHOOSE
OPERATING CYCLE

If the food probe temperature is <30 °F, the display will show:

HEATED FOOD PROBE
OPEN DOOR!

b. Open the door.

c. Press the (**"START/STOP"**) button to start the cycle.

HEATED FOOD PROBE
READY TO START

READY TO
START
Blinks

The display will now show:

HEATING
FOOD PROBES

After 5 seconds the display will show:

HEATING COMPLETE
EXTRACT THE PROBES

! **NOTE:** *To stop any cycle before it has finished, press* *("START/STOP").*

The controller will beep for a few seconds. If you still want to stop the cycle, press (**"START/STOP"**) again. If you do **NOT** want to stop, do nothing and the cycle will continue.

UNIT IN PROCESS
DO YOU WANT TO STOP?

8. PREPARING AND USING THE OPTIONAL PRINTER

a. With the display reading "OFF", press the ("PRINT") button.

OFF

b. To start printing, press the ("START/STOP") button.

PRINT EVENTS MEMORY
READINGS LEFT 249

After a few seconds the display will show:
and the printer will be printing.

PRINT EVENTS MEMORY
PRINTING...

9. TO CLEAR DATA

a. To clear existing data that is no longer needed from the controller, from the "OFF" display, press and together for about 10 seconds.

OFF

b. Press .

CLEAR EVENTS MEMORY? **NO**	NO Blinks

c. Press .

CLEAR EVENTS MEMORY? **YES**	YES Blinks

d. Enter your password, then press .

CLEAR EVENTS MEMORY? **ENTER PASSWORD** ***

e. Wait about 40 seconds,

CLEAR EVENTS MEMORY? **PLEASE WAIT...**

after which the display will show, for only 2 seconds:

CLEAR EVENTS MEMORY? **COMPLETE**

The display will go back to "OFF" and all 440 reading spaces will be available.

PRINTER

NOTE: The optional printer is delivered fully installed

LOADING A ROLL OF PAPER

1. Remove the paper cover by pressing on the groove patterns to pop the front edge up. Lift off the cover.
2. Press the rocker switch to the left. The light will go off.
3. Unroll several inches of paper.
4. Cut a straight edge on the paper roll if it is jagged. This will facilitate the entry of the paper into the printer.
5. Slide the paper (with the roll above the paper) through the slot connecting the paper compartment and the printer compartment. It can be slid in about 1/4" before it stops.
6. While holding the paper in place, press the rocker switch to the Paper Feed position and hold it there. The printer will activate and a rubber roller will pull the paper into the printer compartment. Release the switch when an inch of paper has emerged from the top of the printer.
7. Slide the paper through the slot in the printer cover.
8. Push the back of the printer cover down and into place.
9. Press the front of the printer cover down to lock in place.
10. Put the paper spindle into the paper roll and place the roll with the spindle onto the snaps near the back of the printer. Turn the paper roll to take up any slack. Make sure the roll of paper turns freely. If it does not turn freely, the paper will jam and can possibly damage the printer mechanism.

REMOVING A ROLL OF PAPER

1. Using the Paper Feed Switch, advance the paper about one inch beyond the paper cutter.
2. Lift the paper roll away from the printer housing and cut the paper feeding to the printer with scissors. Try to make the cut as square as possible to help the next time you reload the paper.
3. Pull the remaining paper through the printer mechanism. Be sure to pull the paper from the top (paper cutter side).

WARNING: Pulling the paper out from the back of the printer will damage the print mechanism.

OPERATING THE PRINTER

The Paper Feed switch on the printer is a rocker type switch. Push the left side of the rocker switch to toggle the printer ON or OFF. A red light will go on when the printer switch is ON. Push the right side of the switch to advance the paper.

MAINTENANCE

When printing becomes difficult to see, replace the ribbon in your printer with an Epson HX-20 cartridge ribbon.If your printer is used infrequently, the print impression may become weak because the ribbon dried out. In that case, advance the ribbon to a new section by holding down the Paper Feed switch for several seconds.

REPLACING THE RIBBON (NO PAPER IN THE PRINTER)

1. Turn the printer OFF.
2. Four small grooves are embossed on each side of the printer cover. Push down on one or both of these areas until the printer cover tilts up, then lift the cover completely off.
3. Push down on the right side of the ribbon cartridge where it is marked "PUSH". Remove the cartridge.
4. Install the new cartridge. Be sure the cartridge is inserted firmly to prevent weak or irregular printing. The cartridge must be properly seated and aligned for best printing.
5. Turn the cartridge "knob" (marked by an arrow) clockwise to take up slack.
6. Replace the cover.
7. Replace the paper.

REPLACING THE RIBBON (WITH PAPER IN THE PRINTER)

1. It is possible to insert the ribbon cartridge if there is already paper in the printer.
2. Hold the cartridge at each end with thumb and fo refinger and slide it over the paper and into the printer compartment.

Be sure the paper goes between the ribbon cartridge and the ink ribbon. If you get ribbon ink on the printer case, wipe it off immediately as once it dries it is difficult to remove.

MAINTENANCE & CLEANING

CLEANING THE CONDENSER

For correct and efficient operation of the blast chiller, it is necessary that the condenser be kept clean so that air can circulate around it freely and come into contact with the whole of its surface.

Figure 1

This operation (to be performed every 30 days, max.) can be accomplished using a brush (non-metallic) to remove all the dust and dirt from the condenser fins. Remove the finned grid to gain access to the condenser.

CLEANING THE STORAGE COMPARTMENT

Clean the inside of the storage compartment daily to avoid altering the taste and aroma of the food. Clean the inside, the grid supports and the grids with a mild detergent and then rinse thoroughly. The storage compartment and its internal components have been designed to aid all cleaning operations. Clean the outside surfaces regularly with a detergent for stainless steel and dry using a soft cloth. Always defrost the unit (see manual).

DO NOT USE ABRASIVES, SOLVENTS OR GLASS WOOL (Fig. 3).

Avoid using sharp implements and abrasives, especially when cleaning the evaporator (Fig. 2).

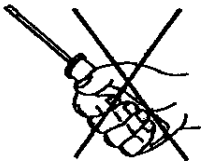
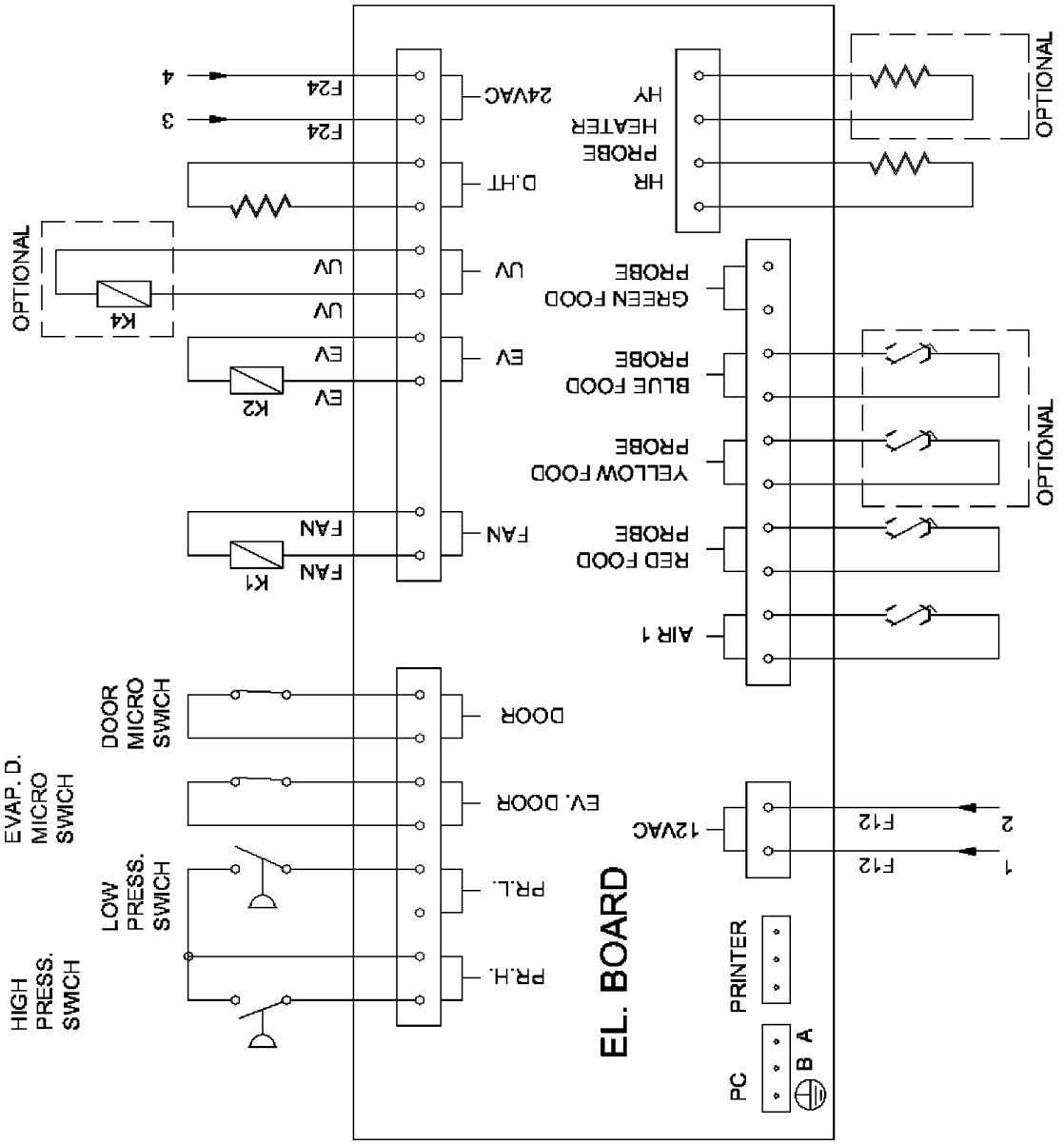


Figure 2

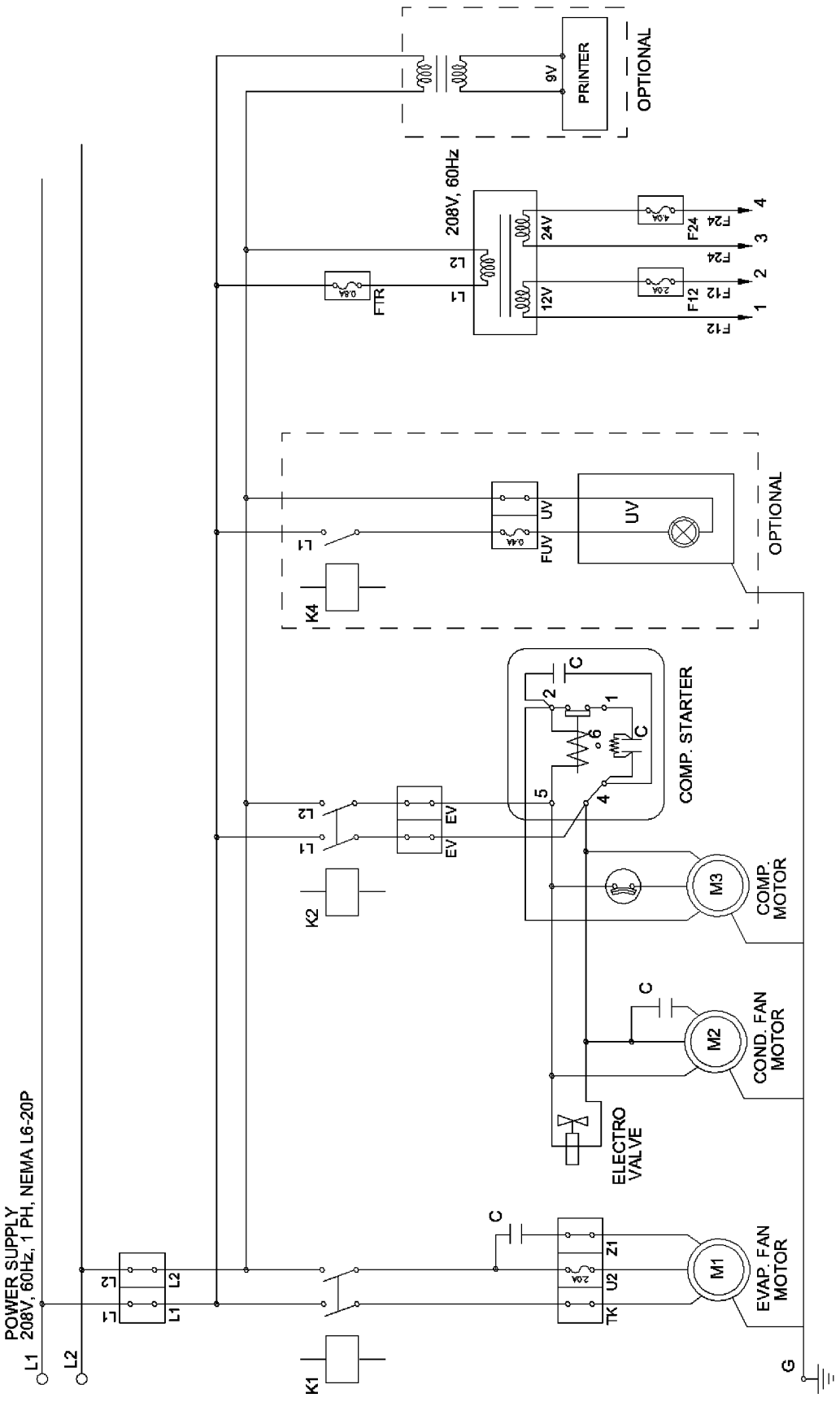
Figure 3

! NOTE: *If additional refrigerant should be needed, be certain to use the correct type and amount as shown on the nameplate.*

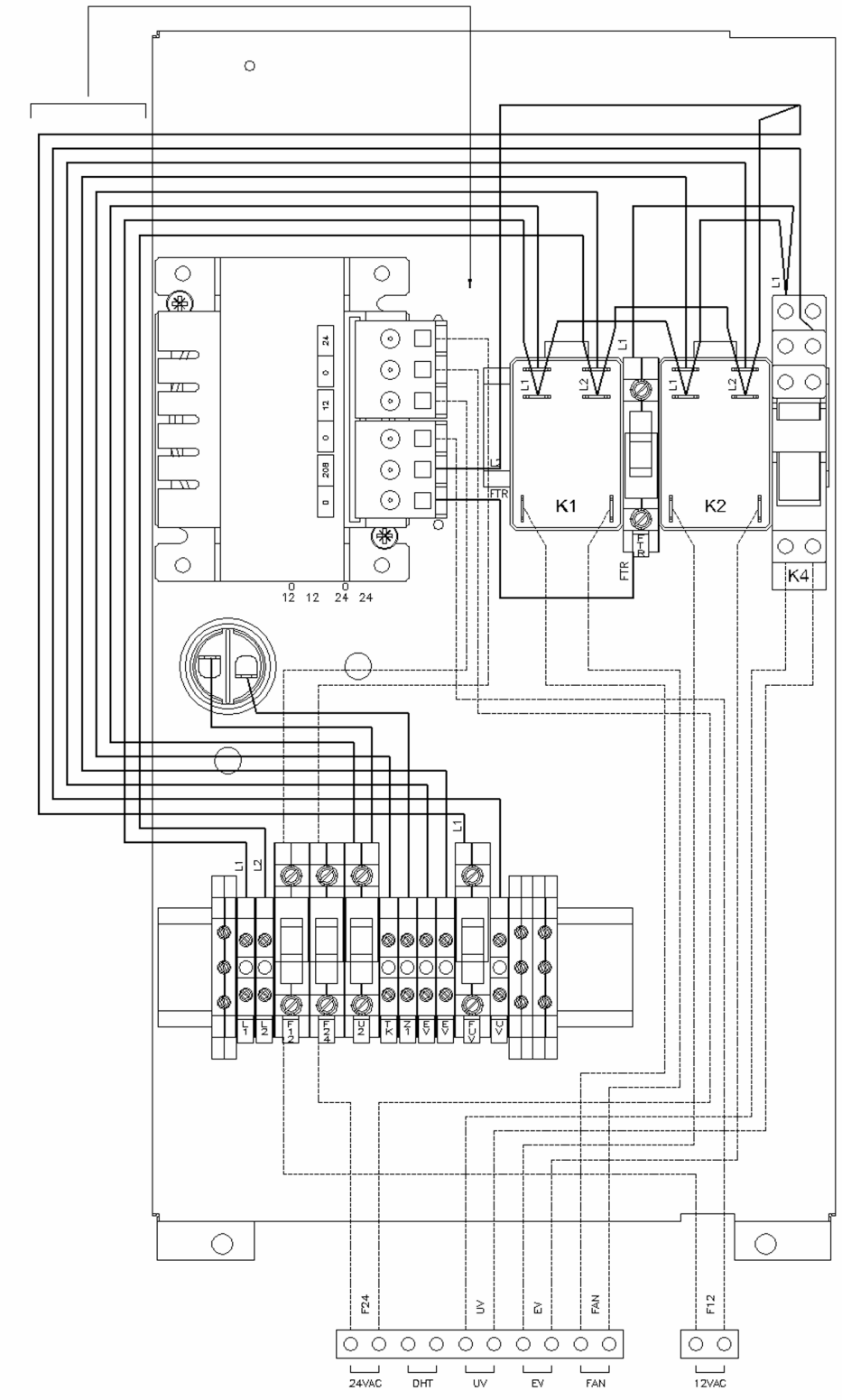
Electrical Wiring Schematic



Electrical Wiring Schematic



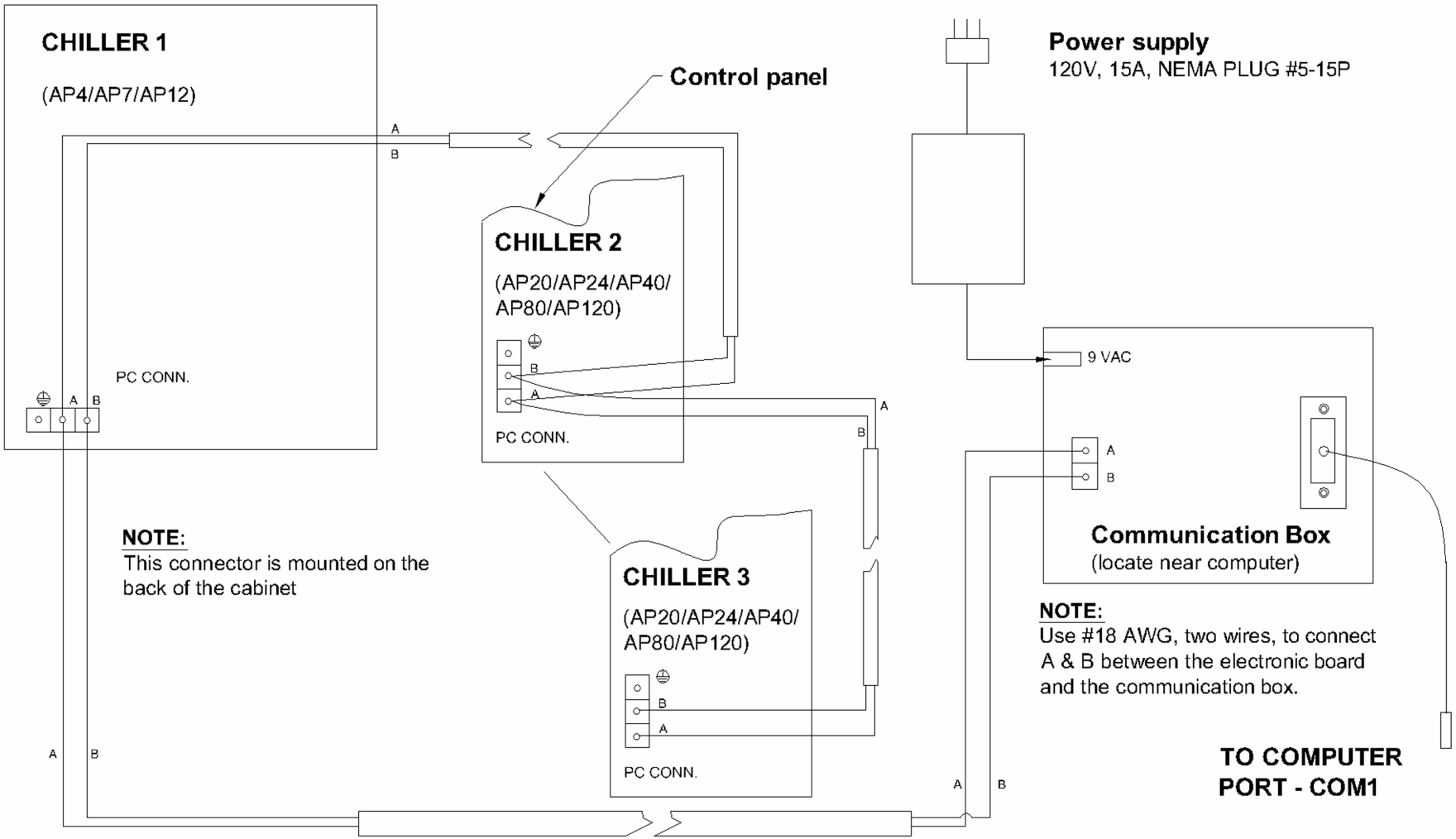
Electrical Wiring Schematic



14 AWG BLACK WIRE

16 AWG RED WIRE

Computer Connection



PARTS LIST

Part Number	Description
AC990059	Printer
AC990060	Relay 10 A Finder (UV)
AC990074	Transformer 208V/24V/12V
AC990075	Transformer for Printer
AC990102	Electronic Board "BLUE SYS" (C)
AC990104	PC Connection Box
AC990105	Connection Cable, Serial
AC990108	Air Probe - PT100
AC990119	Compressor Aspera (R404A Refrigerant)
AC990136	Evaporator Fan
AC990137	Food Probe - Non Heated
AC990145	Food Probe - Heated
AC990147	Magnetic Door Switch
AC990155	Solenoid, Danfoss
AC990156	Solenoid Socket
AC990159	UV Lamp, 6W
AC990161	Printer Power Cable
AC990173	Compressor Starter Kit
AC990175	Condenser Fan Motor
AC990178	AC Adaptor PC Connection
AC990191	Relay 30 A Finder
AC991015	Condenser
AC991024	Evaporator
AC991025	Expansion Valve, Tes2
AC991027	Filter Drier
AC991031	High/Low Pressure Switch
AC991034	Liquid Receiver
AC991035	Sight Glass
AC991037	Orifice 01
AC991039	Solenoid Valve EVR3
AC993022	Door Gasket 30 3/4" x 26 1/2"
AC993028	Drip Pan

ORDERING PRINTER SUPPLIES (RIBBON & PAPER)

Replacement paper and ribbons for the optional printer for your blast chiller can be ordered from a local distributor of Weigh-Tronix supplies.

To locate a distributor near you:

If you have access to the internet:

- Go to www.wtxweb.com
- Enter your zip code or city / state

If you do not have access to the internet:

- Call Dinex International at 1-888-673-4639

Listing of Weigh-Tronix items and part numbers:

Weigh-Tronix Item Description	Weigh-Tronix Part Number
Paper (Roll)	22335-0018
Ribbon, Black	22332-0029

DINEX® Warranty

These Warranties cover the following Dinex International, Inc. ("Dinex") equipment products (the "Warranted Products"):

- Rethermalization Equipment Products
- Induction Heating System Products (excluding Induction Bases covered under separate warranty)
- Milk Cooler Products
- Ice Cream Freezer Products
- Air Curtain Refrigerator Products
- Blast Chiller Products
- Hot/Cold Food Counter Products
- Plate, Rack and Tray Dispenser Products
- Plate Heater Products
- Base Heater Products
- Drying and Storage Rack Products
- Starter Station Products
- Conveyer Products
- Tray and Other Cart Products

Warranted Products also includes any other Equipment System Products identified on Dinex's website (*www.dinex.com*) from time to time.

Standard Warranty. Except as indicated otherwise below, Dinex warrants that the Warranted Products will be free from defects in title, material and workmanship under normal use and service and will perform substantially in accordance with Dinex's written technical specifications for the Warranted Products (as such specifications exist on the date the Warranted Products are shipped) (the "Product Specifications"). This warranty covers both parts and labor and is available only to end-users (the "Customers") that purchase the Warranted Products from Dinex or its authorized distributors. For the purpose of these warranties, a defect is determined by Dinex after its good faith investigation.

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Supplies and Accessories. Dinex's warranty for its supplies and accessories that are shipped with Warranted Products is covered by a separate warranty statement, which is available at *www.dinex.com*.

Services. Dinex warrants that any service it provides to Customer will be performed by trained individuals in a workmanlike manner.

DURATION
Dinex provides a one year warranty for the Warranted Products. The warranty period begins on the date the Warranted Products are shipped to Customer. The warranty period for any Warranted Product or part furnished to correct a warranty failure will be the unexpired term of the warranty applicable to the repaired or replaced Warranted Product.

REMEDIES
If Customer promptly notifies Dinex of Customer's warranty claim and makes the Warranted Product available for service, Dinex will, at its option, either repair or replace (with new or exchange replacement parts) the non-conforming Warranted Product or parts of the Warranted Product. With respect to Dinex's licensed software, Dinex will, at its option, either correct the non-conformity or replace the applicable licensed software. Warranty service will be performed without charge from 8:00 a.m. to 5:00 p.m. EST, Monday-Friday, excluding Dinex holidays, and outside those hours at Dinex's then prevailing service rates and subject to the availability of personnel. With respect to Dinex's warranty for the services it provides to Customer, Customer's exclusive remedy shall be the re-performance of the services by Dinex. The foregoing remedies are Customer's exclusive remedies and Dinex's sole liability for warranty claims under this warranty statement. This exclusive remedy shall not have failed of its essential purpose (as that term is used in the Uniform Commercial Code) as long as Dinex remains willing to repair or replace defective Warranted Products within a commercially reasonable time after being notified of Customer's warranty claim.

LIMITATIONS
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These warranties do not apply to, and Dinex shall not have any obligation to Customer hereunder with respect to, any warranty claim resulting from or arising out of: (i) normal wear and tear; (ii) damage caused by shipping or accident; (iii) damage caused by improper installation, repair or alteration not performed by Dinex; (iv) the use of the Warranted Product in combination with any software, tools, hardware, equipment, supplies, accessories or any other materials or services, not furnished by Dinex or recommended in writing by Dinex; (v) the use of the Warranted Product in a manner or environment, or for any purpose, for which Dinex did not design or license it, or inconsistent with Dinex's recommendations or instructions on use including, but not limited to, power supply requirements identified in Product Specifications; (vi) any alteration, modification or enhancement of the Warranted Product by Customer or any third party not authorized or approved in writing by Dinex; (vii) Warranted Product manufactured to meet customer specifications or designs; or (viii) any accessories or supplies or other equipment or products that may be delivered with the Warranted Product.

In addition, these warranties do not cover: (i) Any defect or deficiency (including failure to conform to Product Specifications) that results, in whole or in part, from any improper storage or handling, failure to maintain the Warranted Products in the manner described in any applicable instructions or specifications, inadequate back-up or virus protection or any cause external to the Warranted Products or beyond Dinex's reasonable control, including, but not limited to, power failure and failure to keep Customer's site clean and free of dust, sand and other particles or debris; (ii) the payment or reimbursement of any facility costs arising from repair or replacement of the Warranted Products; (iii) any adjustment, such as alignment, calibration, or other normal preventative maintenance required of Customer; and (iv) expendable supply items.